

**DETAILED ACTION**

***Response to Amendment***

This Non-final office action is in response to the Final Office action that was inadvertently mailed to the applicant on 5/28/08. The Office Action dated 5/28/08 is a duplicate of the Final Office Action mailed out on 2/24/08. Thus this Non-Final Office Action is meant to replace the office action mailed out on 5/28/08. Thus the Examiner is withdrawing the Finality of the 5/28/08 Final Office Action.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/5/08 has been entered.

***Response to Amendment***

Claims 1, 18 and 33 have been amended.

Claims 1 – 45 are currently pending.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 2, 3, 18, 20, 33, 34, 35 and 45 are rejected under 35 U.S.C. 102(e)**

**as being anticipated by Goschy et al (US 6,545,661).**

**Claims 1, 3, 18, 20, 33, 34, and 35:** Goschy et al (hereinafter "Goschy) discloses a control device for controlling the display of a computer system for use with a video game. Goschy discloses that the control device can be a gun shaped controller that comprises a housing that is of a shape that is adapted to be handled by a user (Goschy Fig 1, 3). Goschy discloses that the game controller contains a coordinate control unit that includes at least one motion sensor included in the housing to generate input information regarding the horizontal (x-axis) and vertical (y-axis) tilt of the control device (Goschy 1:54 - 2: 19). Goschy further discloses a game play control unit included within the controller housing for generating game play input information, such as viewpoint changes and game character movement changes (Goschy 3: 2 – 19). Goschy further discloses a controller that is adapted to process the input information from the coordinate control system to provide to the computer system point of view information of the user in a video game virtual environment and process the input

information from the game play control unit to provide the computer system with information representative of changes of at least latitude and longitude of the virtual game character in the virtual environment. The accelerometers measure the amount of tilt of the game controller, the tilt of the game controller is indicative of the user's change in viewpoint outside of the virtual game environment.

**Claim 2:** Goschy discloses a control unit that has the shape of a firearm wherein the control unit comprises a central body, a handgrip extending downward from the rear section of the central body, and a barrel forward of the central body (Goschy Fig 3).

**Claim 45:** Goschy discloses the use of a tactile feedback unit that provides tactile feed back to the user by means of a vibration unit (Goschy 6:56 – 60).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 4 – 7, 17, 21 – 23, 32, 36 – 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goschy et al (US 6,545,661) in view of Woolston (US 6,902,482).**

**Claims 4 – 7, 17, 21 – 23, 32 and 36 – 39:** Goschy discloses the game controller as discussed above, however Goschy does not specifically disclose the use of a gyroscope to determine the horizontal and vertical positions of the gun controller or the detection of the horizontal and vertical tilting of the gun barrel by means of attaching encoder disks to horizontal and vertical shafts that are attached to the barrel in order to detect the rotation of the shafts by means of optical sensors to determine the users point of view of the user in the video game. However, Woolston discloses a game controller that is in the shape of a sword wherein the player uses the sword to interact with the game. The sword contains a gyroscopic device that is used to impart torque forces to the user, thus providing tactile feedback (Woolston 6:3 – 7). Woolston further discloses that the gyroscopic device include disks that are attached to vertical and horizontal shafts that are rotated. The disks are sensed or "read" by an optical sensor to determine the position (i.e. yaw and pitch) of the flywheels to determine the position of the device that the user is interacting with (Woolston 8:8 – 22). The sensed position is used to determine the longitudinal and lateral movement of a character displayed on a display screen.

It would be obvious to one of ordinary skill in the art to use a gyroscopic sensor setup like that of Woolston to provide not only tactile feedback to the user of the device

but also the provide for the detection of the user's point of view or position of the device by means of rotary disks that are attached to shafts that rotate by attaching the gyroscopic device to the gun controller such as by means of the barrel. This would enable the system of Goschy to accurately determine the positioning of the barrel.

**Claims 8, 9, 24, 25 and 40 – 42 rejected under 35 U.S.C. 103(a) as being unpatentable over Goschy et al (US 6,545,661) in view of Rothchild (US 2002/0171625).**

**Claims 8, 9, 24, 25 and 40 – 42:** Goschy discloses the gung control unit as discussed above wherein the gun controller comprises input buttons such as triggers to perform input commands to game system. However Goschy does not specifically discloses the use of a mouse wheel. Rothchild discloses the use of a pistol grip input controller device that is used to perform the functions of an input device such as a computer mouse. As can be see the pistol-grip device has multiple trigger buttons and a mouse wheel/trackball (Rothchild Figs 1 – 5, par 0067, 0075). Rothchild specifically discloses that the trigger buttons are used to function as left and right mouse buttons (Rothchild par 0060 – 0063).

It would be obvious to one of ordinary skill in the art to modify the gun controller of Goschy to provide many different types of buttons on the gun controller housing to provide input functionality like that of a conventional computer mouse, such as a mouse wheel, left and right mouse buttons. This would thus provide a controller that is able to provide wide away input functionalities.

**Claims 10 – 16, 19, 27 – 31 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goschy et al (US 6,545,661) in view of “VR Gun System” as described by [www.vrimmersions.com](http://www.vrimmersions.com) as evidenced by “VR Gun System Specifications”**

<http://web.archive.org/web/20030623201323/http://vrimmersions.com/VRGunspec.htm> posted on June 23, 2003 in view of “Custom VR Systems”

<http://web.archive.org/web/20030213062555/http://www.vrimmersions.com/systems.htm> (hereinafter “Systems.htm”) posted on Feb 13, 2003

**Claims 10 – 14, 19, 26, 27, 28, and 43:** Goschy discloses the gun controller as discussed above. Goschy discloses a directional controller adapted to input information regarding the latitude and longitude positions of the game player in the virtual game space (Goschy 3:5 – 19) Goschy discloses a coordination activation button that is adapted to selectively enable and disable input information to the computer system (Goschy 7:45 – 54). Goschy does not specifically disclose a plurality of buttons that are used for running crouching, jumping and special actions. Wherein the player may use one hand to grip the handgrip of the gun while the other hand may be positioned on another handgrip and operate buttons on the handgrip. VRGunspec.htm discloses a gun controller that utilizes a plurality of different buttons that are used to emulated mouse input buttons as well as a plurality of other different functions. One such function may be to enable and disable the screen tracking of the gun controller by means of an on/off tracking button. VRGunspec.htm discloses that the many different buttons may

be located along various surfaces of the gun controller such as the trigger, body of the gun which runs along the barrel of the gun and along the gun clip section were in the user may utilize this clip portion as a handgrip (VRGunspec.htm pages 1- 3). However Systems.htm discloses a gun controller that uses a plurality of different buttons that are used for actions such as running, crouching and jumping (Systems.htm page 3).

It would be obvious to one of ordinary skill in the art to modify Goschy in view of VRGunspec.htm in view of "Systems.htm" to provide a gun controller wherein many different buttons perform various actions such as running crouching and jumping as well as enable/disable the screen tracking feature of the game. This would provide added versatility of the game controller thus enabling the player to perform common actions too many first person shooting games without necessitating that the player remove his hands from the gun to use a separate game controller such as a keyboard.

**Claims 14 and 29:** Goschy discloses the use a gun that incorporates a trigger as a shoot button (Fig 3).

**Claims 15 and 30:** Goschy discloses that the gun controller may be modeled after a real handgun. However Goschy does not specifically disclose a gun that comprises a removable shoulder stock that rests against the users shoulder. VRGunspec.htm discloses a gun with a shoulder stock that extends from the central body of the gun, which the user can use to steady the gun against his shoulder. However VRGunspec.htm does not discloses that the shoulder stock is removable. However it would be obvious to make the shoulder stock removable in order to model

the gun after actual tactical weapons such as an MP5 machine gun that uses a removable stock.

**Claims 16, 31 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goschy et al (US 6,545,661) in view of Lin (US 6,902,483).**

**Claim 16, 31, and 44:** Goschy discloses the gun controller movement as disclosed above, however Goschy does not specifically disclose a gun controller that comprises a display unit mounted on the gun body to display additional information to the user. However Lin discloses a video game gun controller that comprises a mounted video display on the gun body wherein the display provides additional information to the player playing the game such as view of the sight scope or a radar screen (Lin 3:27 - 32).

It would be obvious to one of ordinary skill in the art to modify Goschy in view of Lin to provide a video display that is mounted on the gun controller body to provide the player with additional video game information pertaining to the game they are playing. This would provide the player with added information such as a sight scope or radar screen to help make better in-game playing decisions.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROSS A. WILLIAMS whose telephone number is (571)272-5911. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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